

NOT For SALE # PACKAGING use only 4

Work Order ID 154196

154196

Page 1

Tuesday, December 06, 2016 1:45:08 PM

Item ID: D4060-1 Accept *N900040100* Setup Start *NS1*
 Revision ID: Stop *NS2*
 Item Name: Ski Clamp, Top
 Start Date: 12/6/2016 Start Qty: 40.00 *40* Cust Item ID:
 Required Date: 12/23/2016 Req'd Qty: 40.00 *40* Customer:
 Reference:

Approvals: Process Plan: M Date: 16-12-5 Tooling: _____ Date: _____
 QC: _____ Date: _____ SPC (Y/N): _____ Date: _____
 Run Start *NR1*
 Stop *NR2*

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
Draw Nbr	Revision Nbr								
D4060	C							DAS 46 9-89	16/12/07

100

0.00

100

Waterjet

FLOW CNC Waterjet

Memo

1-Cut as per Dwg
 Dwg Rev: C
 Prog Rev: C
 2-Deburr if necessary

0.33

110

QC2- Inspect parts off machine FAI/FAIB

0.00

110

QC

Quality Control

Memo

0.07

120

QC8- Inspect parts - second check

0.00

120

QC

Quality Control

Memo

0.13

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Page 2

Item ID: D4060-1 Accept ***N900040100*** Setup Start ***NS1***
 Revision ID: Stop ***NS2***
 Item Name: Ski Clamp, Top
 Start Date: 12/6/2016 Start Qty: 40.00 ***40*** Cust Item ID:
 Required Date: 12/23/2016 Req'd Qty: 40.00 ***40*** Customer:
 Reference:

Approvals: Process Plan: _____ Date: _____ Tooling: _____ Date: _____
 QC: _____ Date: _____ SPC (Y/N): _____ Date: _____
 Run Start ***NR1***
 Stop ***NR2***

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
130	Form as per dwg	0.00			DAS 30 9-89	40			DEC 13 2016
130 Brake NC	Memo	0.53							
140	QC5- Inspect part completeness to step on W/O	0.00							
140 QC	Memo	0.13							
Quality Control									
150	Identify as per dwg & Stock Location	0.00							
150 Packaging	Memo	0.07				40x			16/12/13 DAS 36 9-89
Packaging									

N/A 16-12-S

Landing
Gear

N/A 16-12-S

Work Order ID 154196

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Item ID: D4060-1

Accept

N900040100Setup Start ***NS1***

Revision ID:

Stop ***NS2***

Item Name: Ski Clamp, Top

Start Date: 12/6/2016 Start Qty: 40.00

40

Cust Item ID:

Required Date: 12/23/2016 Req'd Qty: 40.00

40

Customer:

Reference:

Approvals: Process Plan: _____ Date: _____ Tooling: _____ Date: _____

Run Start ***NR1***

QC: _____ Date: _____ SPC (Y/N): _____ Date: _____

Stop ***NR2***Sequence ID/
Work Center IDOperation
DescriptionSet Up/
Run Hours

Tool ID

Tool #

Plan
CodeAccept
QtyReject
QtyReject
NumberInsp.
Stamp

160

QC21- Final Inspection - Work Order Release

0.00

160

QC

Memo

0.67

Quality Control


Give to Emilie
Not for stock.
AD 12.05

Picklist Print

Tuesday, December 06, 2016 1:45:20 PM

Page 1

Work Order ID: 154196

154196

Parent Item: D4060-1

D4060-1

Parent Item Name: Ski Clamp, Top

Start Date: 12/6/2016

Required Date: 12/23/2016

Start Qty: 40.00

Required Qty: 40.00

Comments: IPP Rev:A new issue DD 10.02.16 verified by:EC

Component Item ID/ Item Name	Replacement Item ID	Mfg/ Purch	Bin Item	Primary Location	Last Location	Route Seq ID	Unit of Measure	Qty on Hand	Qty per Kit	Total Qty	Qty Issued	Date Issued	Status
M304S14GA		Purchased		No		100	sf	23.4800	0.085	3.578947			

M304S14GA

304SS sheet .080

on 16/12/27

Location

Loc Qty

Loc Code

MAT019

23.48

M129972

5.7

M135061

1.29

M135689

2.4

M135860

14.09

✓

DQA: _____ Date: _____

WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: _____ Date: _____

Work Order update only ☐

Work Order: _____ Part No. _____ NCR No. _____	DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐	AGAINST DEPARTMENT/PROCESS Skid-tube ☐ Machining ☐ Thermoforming ☐ Large Fab ☐ Cross tube ☐ Small Fab ☐ Finishing ☐ Composite ☐ Water Jet ☐ Prod. Eng. Coord. ☐ Rec/Store/Packaging ☐ Supplier ☐ Engineering ☐ Quality ☐ Other ☐			
Date : _____	Step #: _____	QTY Effective : _____		MRB (QSI042) Approval	
Description Work Order Deviation		Disposition			
				Completed By	
				Lead hand / Supervisor Approval Verification	
				QC / QA Coordinator Approval	
Root Cause Environment ☐ Design ☐ Doc/Data ☐ Equip/Tooling ☐ Handling/Pre ☐ Material ☐ Internal Transport ☐ Tribal Knowledge ☐ LOA ☐ Substation ☐ Past Expiry Date ☐ Misidentified ☐ No Re-verification ☐ Operator ☐ Offset/Setup ☐ Supplier ☐ Training ☐ Use for Testing ☐ Poor Information ☐ Rushing ☐ Product Improvement ☐ Process Improvement ☐ Manufacturing Process ☐ Past Due ☐		FAULT CATEGORY Pressure/Forced ☐ Bending ☐ Centre Not Concentric ☐ Cracks ☐ Crimp/Kink/Ripple/Wave ☐ Cuffs ☐ Crushing ☐ Heat Treat ☐ Wave/Twist in Tube ☐ Marks/Chatter ☐ Temperature/Cure ☐ Set-up ☐ BOM/Route ☐ Broken/Damage/Defect ☐ Inspection Incomplete/Unqualified ☐ Contamination ☐ Countersink ☐ Cut Too Short ☐ Instructions Incomplete/Unclear ☐ Drill Holes ☐ Power Loss/Surge ☐ Folio/Program ☐ Grain ☐ Weld ☐ Wrong Stock Pulled ☐ Out of Sequence ☐ Off-set ☐ Mislabeled ☐ Fit/Function ☐ Misaligned/off center ☐ Positioned Wrong ☐ Outside Dimensions ☐ Over/Under tolerance ☐ Part Incorrect ☐ Part Lost/Missing ☐ Part Moved ☐ Drawing ☐ Finish ☐ Misread ☐ Turning Sequence ☐			
OTHER : _____					

DART AEROSPACE LTD		Work Order:	154196
Description: Ski Clamp, Top		Part Number:	D4060-1
Inspection Dwg: D4060	Rev: C		Page 1 of 1

INSPECTION SHEET

[illegible]

Measured by:	46 9-89	Checked by:		QC Inspector:	
Date:	1/8/12/07	Date:		Date:	

Engineering Approval: (If necessary)		Date:	
--	--	--------------	--

Rev	Date	Change	Revised by	Approved
A	15.09.09	New Issue	KJ	
B	16.11.02	Dwg Rev updated	KJ	

DQA: _____ Date: _____

WORK ORDER NON-CONFORMANCE / UPDATE

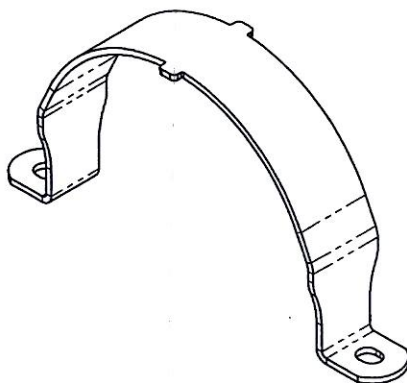
QA Closed: _____ Date: _____

Work Order update only ☐

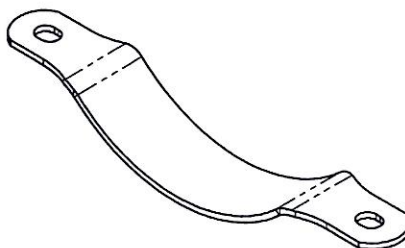
Work Order: _____ Part No. _____ NCR No. _____		DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐		AGAINST DEPARTMENT/PROCESS Skid-tube ☐ Machining ☐ Thermoforming ☐ Large Fab ☐ Cross tube ☐ Small Fab ☐ Finishing ☐ Composite ☐ Water Jet ☐ Prod. Eng. Coord. ☐ Rec/Store/Packaging ☐ Supplier ☐ Engineering ☐ Quality ☐ Other ☐					
Date : _____		Step #: _____		QTY Effective : _____			MRB (QSI042) Approval Completed By Lead hand / Supervisor Approval Verification QC / QA Coordinator Approval		
Description Work Order Deviation				Disposition					

Root Cause		FAULT CATEGORY					
Environment ☐	No Re-verification ☐	Pressure/Forced ☐	Temperature/Cure ☐	Power Loss/Surge ☐	Positioned Wrong ☐		
Design ☐	Operator ☐	Bending ☐	Set-up ☐	Folio/Program ☐	Outside Dimensions ☐		
Doc/Data ☐	Offset/Setup ☐	Centre Not Concentric ☐	BOM/Route ☐	Grain ☐	Over/Under tolerance ☐		
Equip/Tooling ☐	Supplier ☐	Cracks ☐	Broken/Damage/Defect ☐	Weld ☐	Part Incorrect ☐		
Handling/Pre ☐	Training ☐	Crimp/Kink/Ripple/Wave ☐	Inspection Incomplete/Unqualified ☐	Wrong Stock Pulled ☐	Part Lost/Missing ☐		
Material ☐	Use for Testing ☐	Cuffs ☐	Contamination ☐	Out of Sequence ☐	Part Moved ☐		
Internal Transport ☐	Poor Information ☐	Crushing ☐	Countersink ☐	Off-set ☐	Drawing ☐		
Tribal Knowledge ☐	Rushing ☐	Heat Treat ☐	Cut Too Short ☐	Mislabeled ☐	Finish ☐		
LOA ☐	Product Improvement ☐	Wave/Twist in Tube ☐	Instructions Incomplete/Unclear ☐	Fit/Function ☐	Misread ☐		
Substation ☐	Process Improvement ☐	Marks/Chatter ☐	Drill Holes ☐	Misaligned/off center ☐	Turning Sequence ☐		
Past Expiry Date ☐	Manufacturing Process ☐	OTHER : _____					
Misidentified ☐	Past Due ☐						

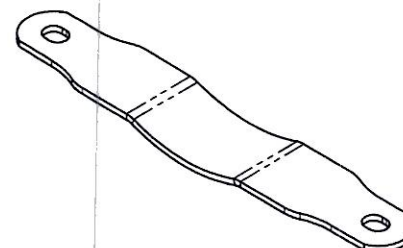
8 7 6 5 4 3 2 1



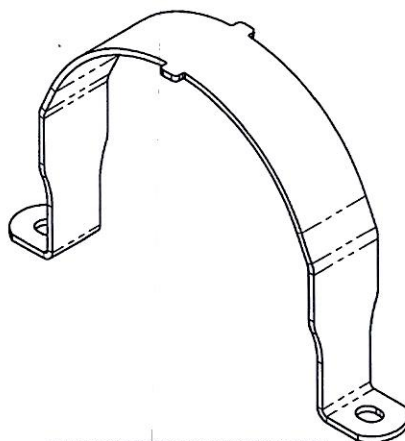
D4060-1 412 SKI CLAMP, TOP



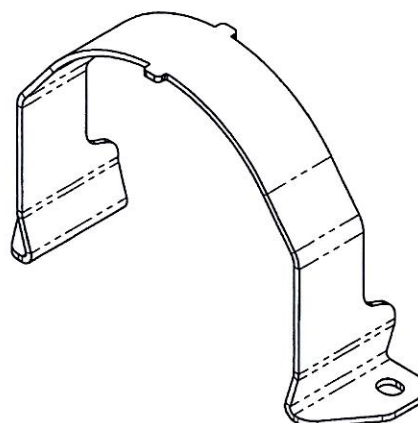
D4060-3 412 SKI CLAMP, BOTTOM



D4060-5 412 SKI CLAMP, AFT



D4060-7 BEARPAW CLAMP



D4060-9 AFT BEARPAW CLAMP

NOTES:

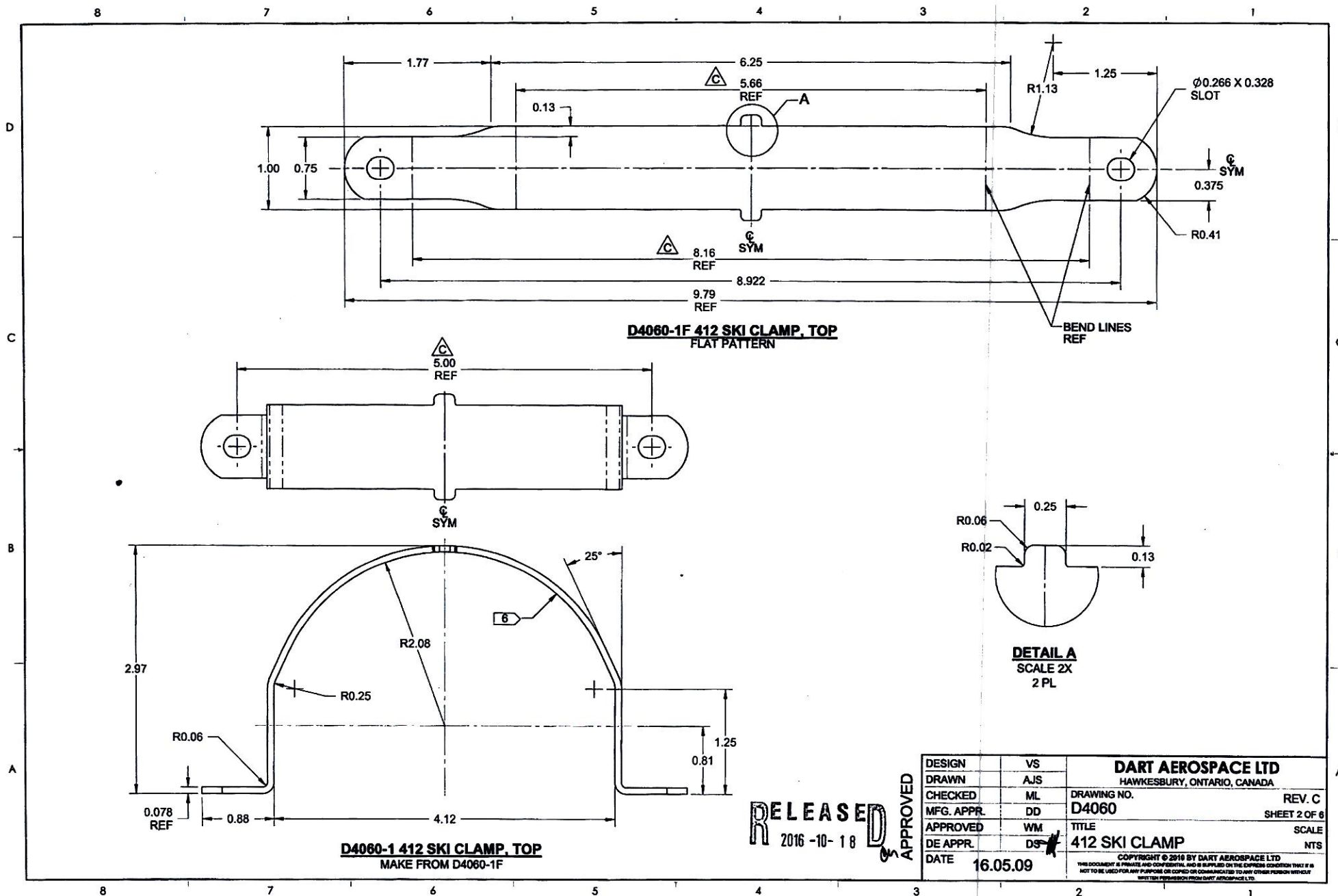
- 1) MATERIAL: AISI 304/316 STAINLESS STEEL SHEET ANNEALED 2B FINISH, 14 GAUGE (0.078 THICK)
PER AMS 5513 (304) OR 5524 (316) OR ASTM A240 OR ASME SA240
REF. DART SPEC. M304S14GA
- 2) FINISH: NONE
- 3) TOLERANCES: PER DART QSI 018 UNLESS OTHERWISE NOTED
- 4) UNITS: INCHES UNLESS OTHERWISE NOTED
- 5) BREAK SHARP EDGES: 0.005 TO 0.010 MAX
- 6) IDENTIFICATION: IDENTIFY PER DART QSI 044
- 7) WEIGHT: D4060-1/-7 = 0.23 lbs, D4060-3/-5 = 0.12 lbs, D4060-9 = 0.28

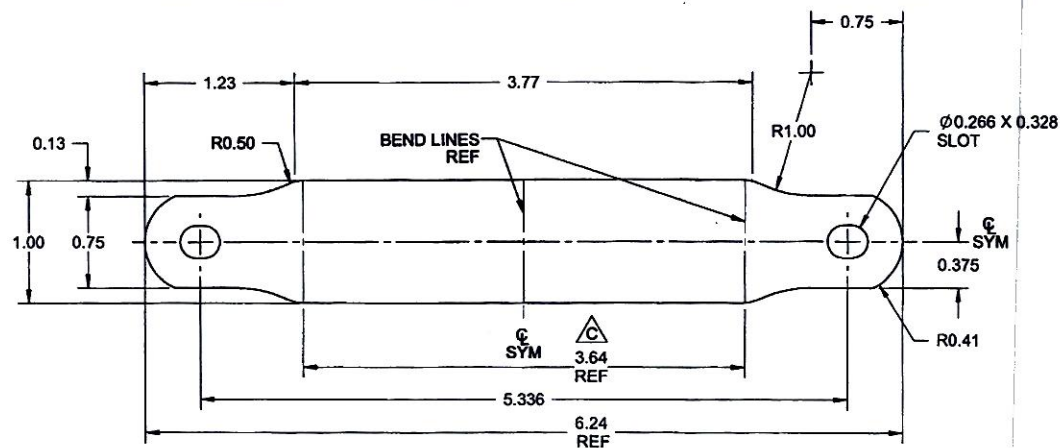
RELEASED
2016-10-18
EN 16-154

APPROVED

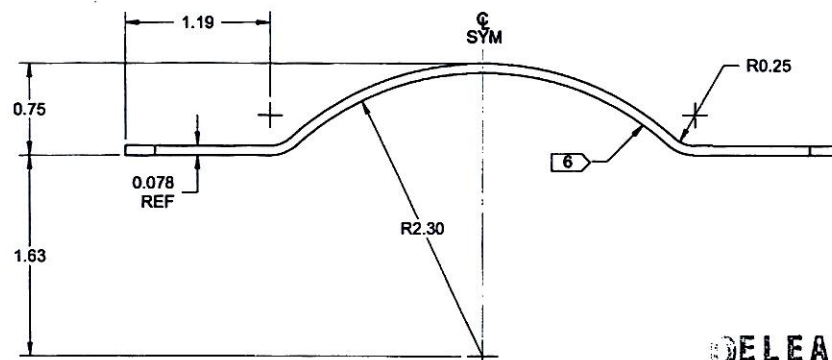
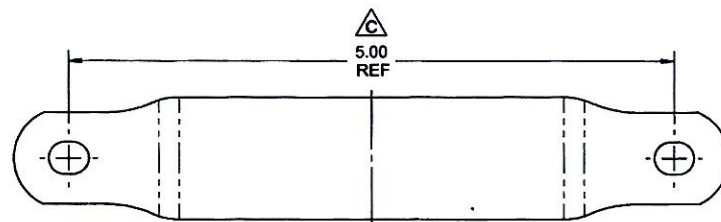
SHOP COPY
RETURN TO
ENGINEERING
UNCONTROLLED COPY
SUBJECT TO AMENDMENT
WITHOUT NOTICE
WORK ORDER
NO. 154196
016-12-5

C	ADD -7 & -9. REASON: CIR16-67. ADD "REF" FOR BEND LINES.	AJS	18.05.09
B	ADD CUSHION RETENTION DETAILS TO -1 CLAMP, REASON: PAR 14-368, PAR 14-331, NCR 14-3521	VS	15.05.14
A	NEW ISSUE	MB	10.03.31
REV.	DESCRIPTION	BY	DATE
DESIGN	VS	DART AEROSPACE LTD HAWKESBURY, ONTARIO, CANADA	
DRAWN	AJS		
CHECKED	ML	DRAWING NO.	REV. C
MFG. APPR.	DD	D4060	SHEET 1 OF 6
APPROVED	WM	TITLE	SCALE
DE APPR.	DS	412 SKI CLAMP	NTS
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D4060-3F 412 SKI CLAMP, BOTTOM
FLAT PATTERN

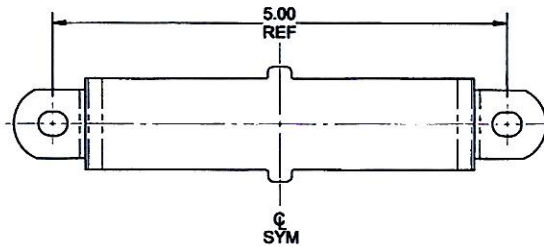
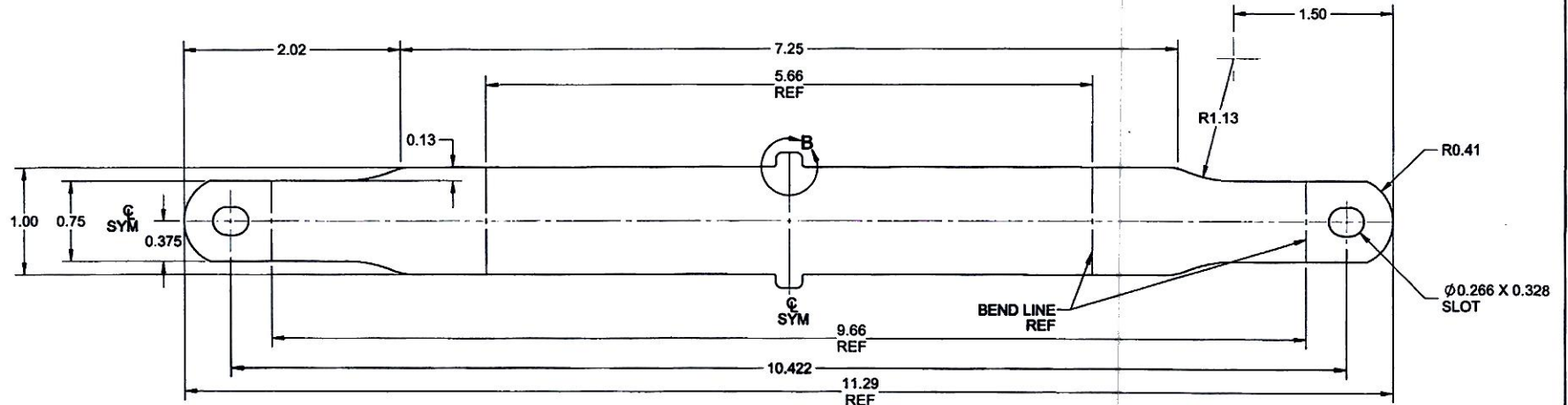


D4060-3 412 SKI CLAMP, BOTTOM
MAKE FROM D4060-3F

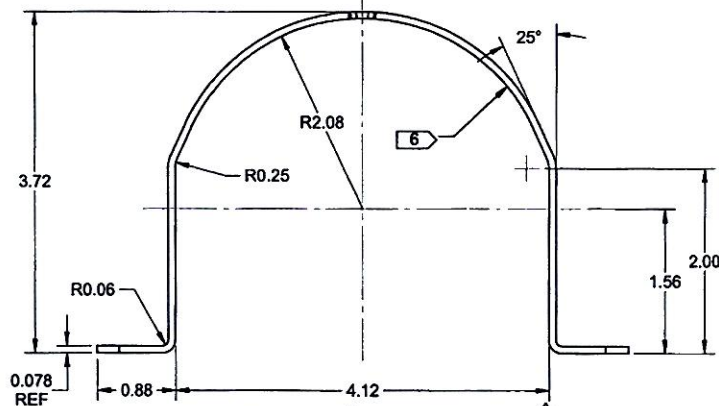
RELEASED
2016-10-18

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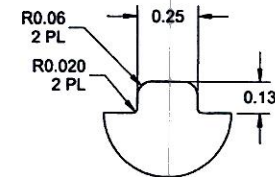
DESIGN	VS	DART AEROSPACE LTD HAWKESBURY, ONTARIO, CANADA	
DRAWN	AJS		
CHECKED	ML	DRAWING NO.	REV. C
MFG. APPR.	DD	D4060	SHEET 3 OF 6
APPROVED	WM	TITLE	SCALE
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D4060-7F BEARPAW CLAMP
FLAT PATTERN



D4060-7 BEARPAW CLAMP
MAKE FROM D4060-7F

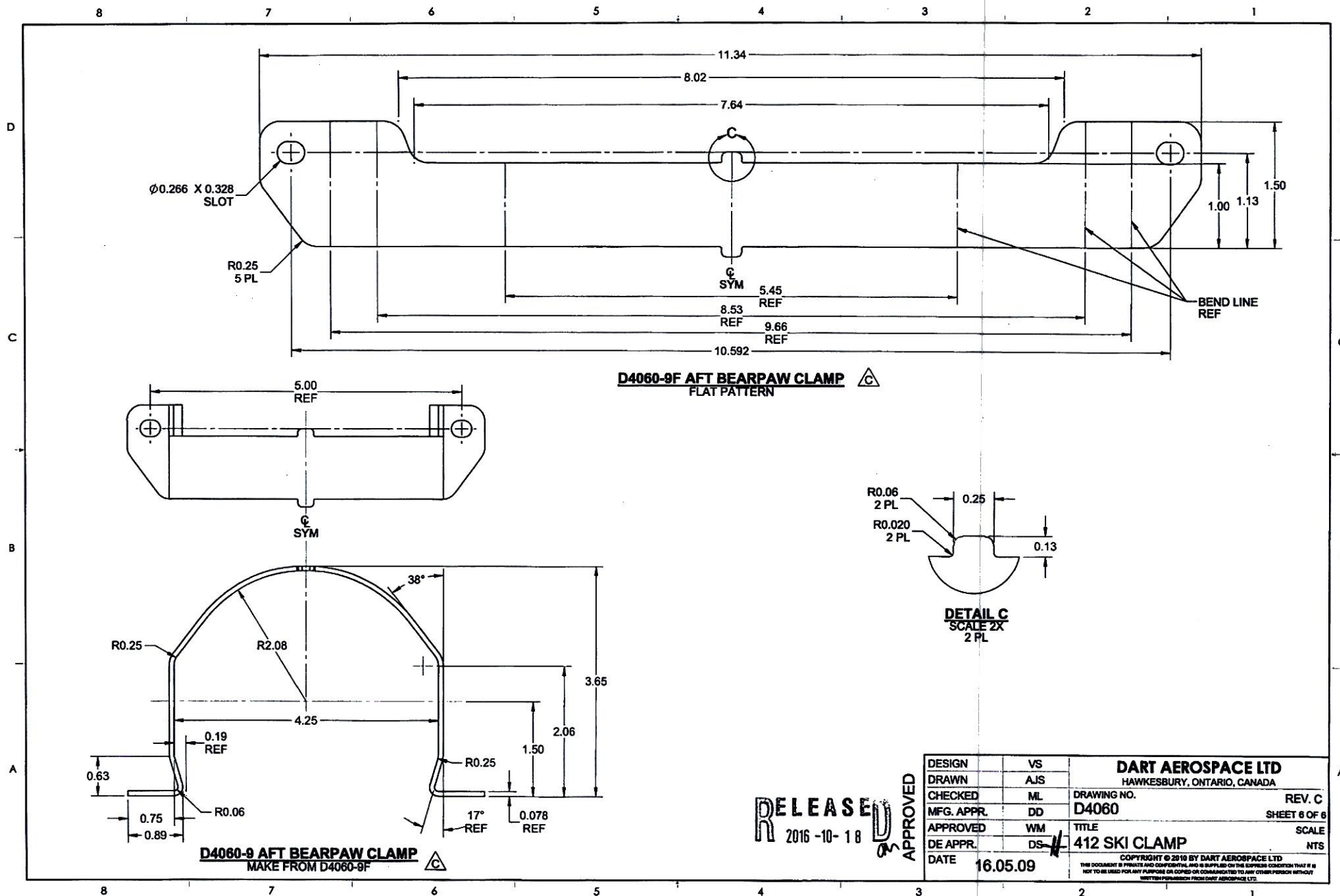


DETAIL B
SCALE 2X
2 PL

RELEASED
2016-10-18

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DESIGN	VS	DART AEROSPACE LTD HAWKESBURY, ONTARIO, CANADA	
DRAWN	AJS		
CHECKED	ML	DRAWING NO.	REV. C
MFG. APPR.	DD	D4060	SHEET 5 OF 6
APPROVED	WM	TITLE	SCALE
DE APPR.	DS	412 SKI CLAMP	NTS
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2016-10-18

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